

Application Serial No. 09/641,636

IN THE SPECIFICATION

Amend page 1, line 28 through page 2, line 8 as follows:

Problems and limitations of prior uplink traffic channel allocation arrangements are addressed by utilizing, i.e., formatting, ~~a-an exclusively~~ dedicated control channel in which a prescribed portion of the control channel resource, for example, frequency, time slot or the like, is reserved for transporting the uplink traffic channel requests. Both the base station and the particular mobile unit know the prescribed portion of the control channel resource a priori. Consequently, when the particular mobile unit transmits an uplink traffic channel request via the prescribed portion of the control channel resource there is no need for adding any control header information, thereby minimizing overhead. Furthermore, the length of the uplink traffic channel requests can be optimally chosen without constraints imposed by other control message schemes. Reduced overhead coupled with the prescribed portion of the control channel resource arriving quite frequently reduces latency in the particular mobile unit acquiring an uplink traffic channel.

Amend page 5, lines 1-25 as follows:

An advantage of using the prescribed dedicated control channel resource for conveying uplink traffic channel requests is that overhead has been eliminated from the control message. That is, headers or the like are not required. This is because both the base station 201 and the particular mobile unit 202 know a priori where the time slots are located in the control channel. Moreover, the number of bits in each of time slots S1 through S4 can be reduced to just the number of bits needed to convey the uplink traffic channel requests. The transmission of uplink traffic channel requests from the particular mobile unit 202 can be made persistently, i.e., periodically repeatedly, until the base station responds. This in turn eliminates latency related to the timing out of timers used in prior mobile units.

It should be noted that in general, the dedicated control channel is a low-rate channel. Moreover, the dedicated control channel has to be partitioned to convey requests and other control messages. Thus, the bandwidth of transmitting requests is very

Application Serial No. 09/641,636

limited. On the other hand, in order to minimize the latency of transmitting requests, the dedicated resource of conveying requests should be available in a periodically recurring, i.e., repeating, manner with the inter-arrival times being kept small. Hence, the size of a request is small. As a result, the mobile unit 202-1 may not be able to convey much information in a request. In addition, as there may not be much coding gain to combat a hostile wireless channel, the probability of a request being lost is high. Therefore, in order to ensure adequate request information can be collectively delivered to the base station 201 and to minimize the adverse impact of losing requests, the mobile unit 202 persistently transmits requests. That is, after the first request is transmitted, the mobile unit 202-1 continues to transmit the second and even third requests instead of waiting for responses from the base station 201 and/or waiting for a timer expiration. This compares with prior arrangements in which the mobile unit 202-1 sets up a timer and waits for a response from base station 201 after transmitting an uplink traffic channel request.

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